



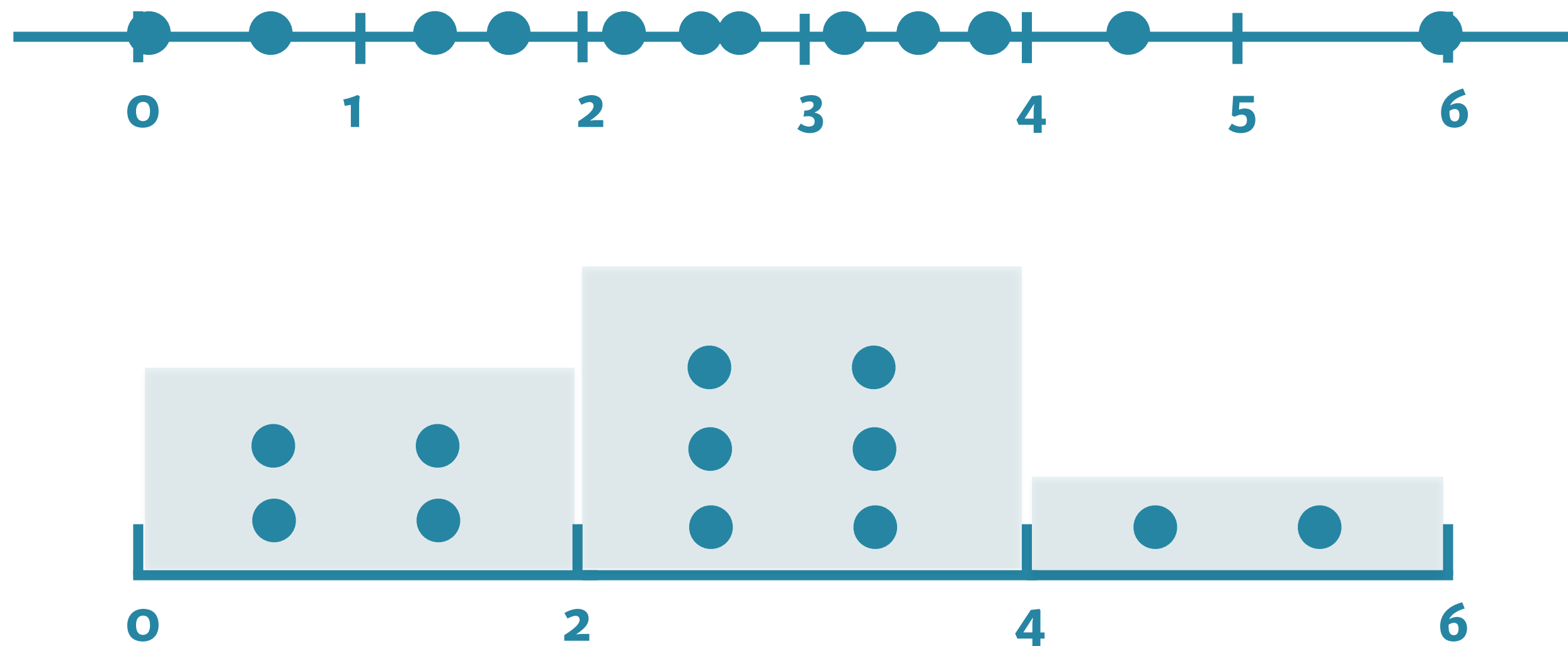
INTRO TO PYTHON FOR DATA SCIENCE

Histograms



Histogram

- Explore dataset
- Get idea about distribution





Matplotlib

```
In [1]: import matplotlib.pyplot as plt
```

```
In [2]: help(plt.hist)
```

Help on function hist in module matplotlib.pyplot:

```
hist(x, bins=10, range=None, normed=False, weights=None,
cumulative=False, bottom=None, histtype='bar', align='mid',
orientation='vertical', rwidth=None, log=False, color=None,
label=None, stacked=False, hold=None, data=None, **kwargs)
```

Plot a histogram.

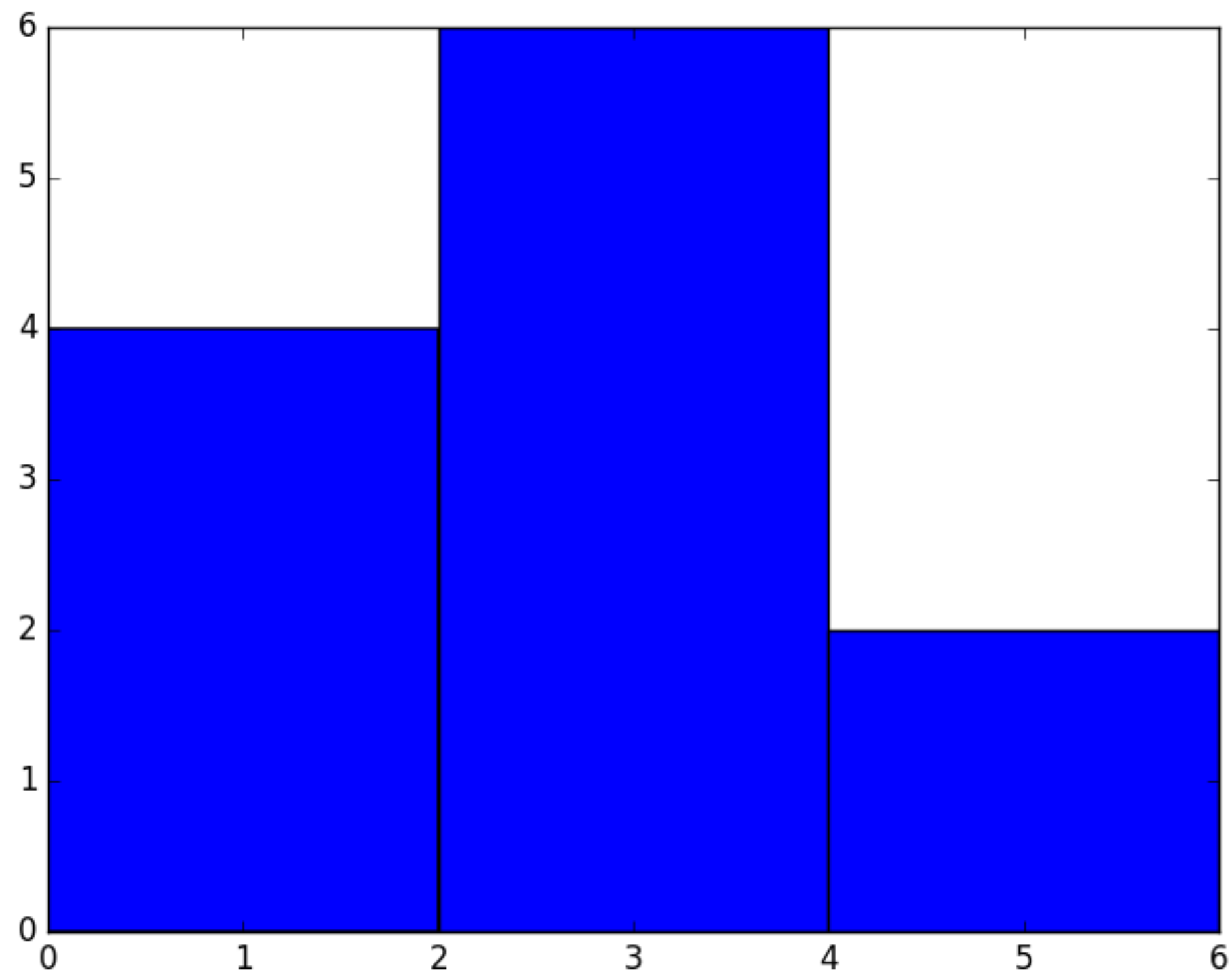
Compute and draw the histogram of *x*. The return value is a tuple (*n*, *bins*, *patches*) or (*n*₀, *n*₁, ...], *bins*, [*patches*₀, *patches*₁, ...]) if the input contains multiple data.

...



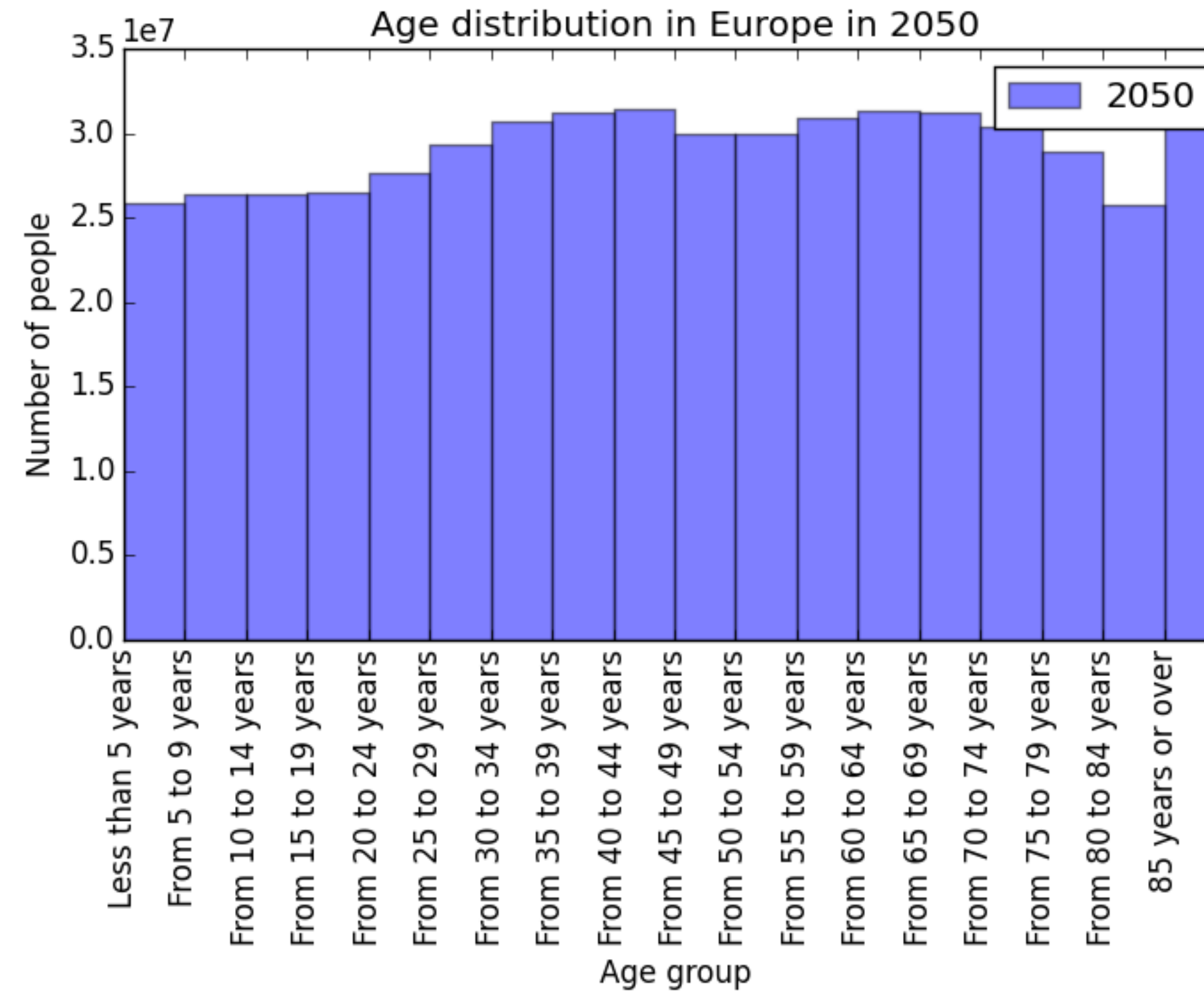
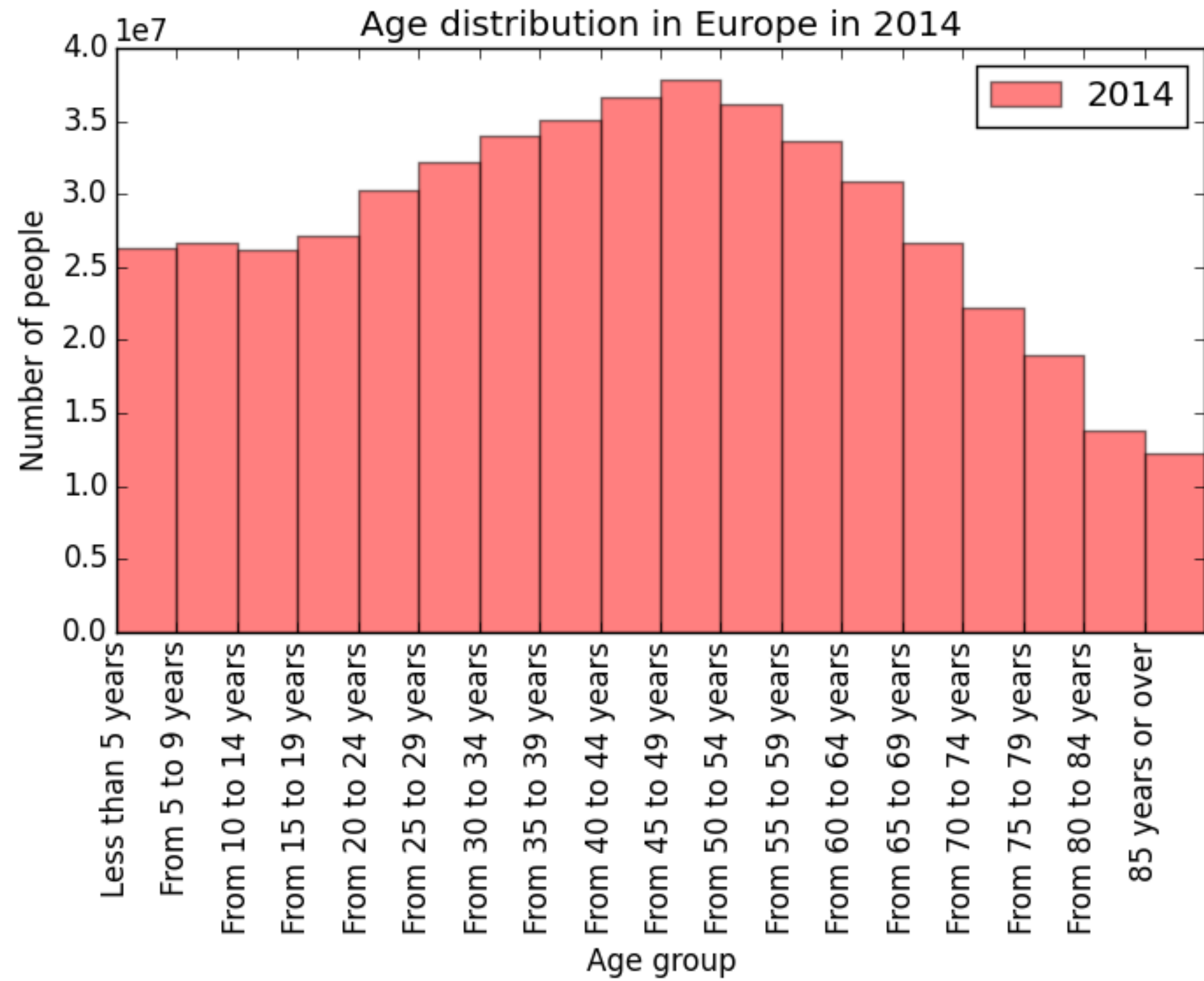
Matplotlib example

```
In [3]: values = [0,0.6,1.4,1.6,2.2,2.5,2.6,3.2,3.5,3.9,4.2,6]  
In [4]: plt.hist(values, bins = 3)  
In [5]: plt.show()
```





Age Distribution





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Let's practice!